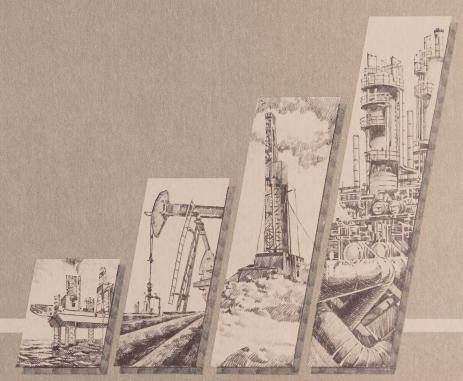
CAI M5 -85C/5





CANADIAN ENERGY AND MINERALS: A TIMELY INVESTMENT



The thrust of the new energy policy is one of less intervention and discrimination towards the oil industry and one that should put the industry back on a solid foundation. The emphasis

on reinvestment and taxation of profits rather than revenues provides for the potential of a renewed period of growth. ??

Richardson, Greenshields Canadian Research Report March 30, 1985

THE CANADIAN OPPORTUNITY

From Atlantic to Pacific, in the eastern offshore and deep into the Arctic region, Canada is a storehouse of untapped resource potential. The second-largest country in the world, it is energy and mineral-rich in virtually every region.

Investment, both domestic and foreign, is needed if Canada is to realize its resource potential. The oil and gas industries are capital intensive and large sums are required to bring nonconventional sources on stream and to fully exploit conventional supplies. Mineral exploration efforts also require

a steady flow of investment capital.

Canadian energy is a more timely investment today than ever before. Through the Atlantic and Western Accords, the Government of Canada has created a positive climate for the energy industry. Taxation of the industry has been lightened considerably, freeing revenue for reinvestment in oil and gas development.

Canada's frontier energy policy and legislation, which had been the subject of international criticism, have been entirely rewritten. The new policy will establish an equitable and profit-oriented royalty and tax regime on Canada's energy frontiers. It includes tax-based exploration incentives which will treat all companies equally.

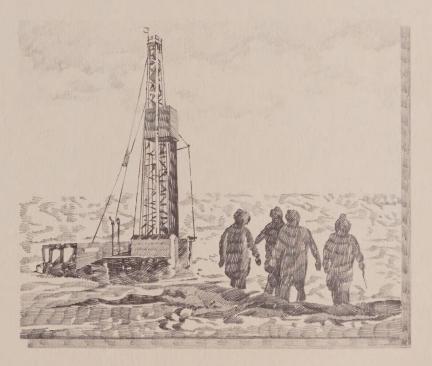
Foreign investment is now welcome in Canada's energy industry.

- ☐ Canadian oil prices were deregulated as of June 1, 1985, which means that crude oil prices are no longer determined by government but are negotiated by buyers and sellers. The Western Accord also removed controls for short-term oil exports, enabling the industry to seek both domestic and export markets and to obtain full value for its output.
- ☐ Canada is also moving towards market-sensitive pricing for natural gas, which will permit more flexible buyer-seller negotiations as well as greater access to the U.S. market.
- ☐ The Petroleum and Gas Revenue Tax (PGRT), a tax on revenue rather than profits, is being phased out quickly. The PGRT has not applied on new production of oil, natural gas and gas liquids since April 1, 1985, and will be phased out completely by 1989. New exploration and development costs of companies that currently pay no corporate income tax can be deducted from the PGRT, and the \$500 000 PGRT credit is maintained.
- ☐ The Petroleum Incentives Program (PIP), which discriminated against foreign investors, will be replaced by a 25 per cent partially refundable investment tax credit on all exploration well costs above \$5 million. The new incentive will be effective from December 1, 1985 to December 31, 1990. PIPs are being grandfathered for existing exploration

agreements to the end of 1987 to ensure stability in frontier exploration and development.

☐ The new frontier energy policy will eliminate the 25 per cent Crown Share currently reserved for the federal government in all interests held on Canada's energy frontiers. As well, the requirement for 50 per cent Canadian ownership will now apply only to production licences for discoveries drilled after March 1982.

☐ Petro-Canada, the Crown-owned oil company, will no longer receive preferential treatment on the frontiers. As well, the new policy will ensure that exploration rights are issued fairly to companies wishing to explore and develop new sources of oil and gas.





The governments of Canada's three western producing provinces have reduced royalty rates and introduced royalty holidays to allow the benefits from these federal initiatives to flow through to industry. As a result, investment prospects in Canada's petroleum industry have improved considerably and are clearly reflected in higher forecast netbacks and rates of return.

Assuming that world oil prices remain at about \$U.S.26 per barrel, netbacks for conventional production by a large Alberta producer will show a marked increase in 1986, the first full year of the Western Accord. Netbacks will increase by \$3.19 per barrel (\$20.07 per cubic metre) for post-1984 oil, by \$3.77 a barrel (\$23.72 per cubic metre) for pre-1974 oil and by \$0.15 per barrel (\$0.94 per cubic metre) for oil discovered between 1974 and 1984. Netbacks will be even higher for small oil producers (as a result of changes in Alberta's royalty tax credit) and will also increase for natural gas, especially for gas brought into production after 1984.

Real rates of return have also improved with the Western Accord. Assuming that world oil prices remain at about \$U.S. 26 per barrel until 1988 and then increase at the annual inflation rate (and that natural gas prices will track domestic oil prices), rates of return will increase by 7 to 12 per cent for typical conventional oil projects in Alberta; 3 to 4 per cent for Alberta gas projects; 18 per cent for Saskatchewan heavy oil projects; 32 per cent for Saskatchewan light oil projects; 12 per cent for British Columbia oil projects;

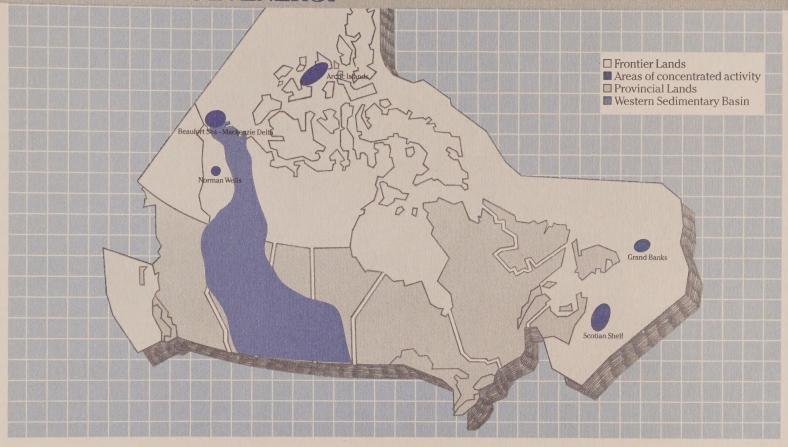
and 7 to 8 per cent for B.C. gas projects.

Opportunities for investing in Canadian minerals also have never been better. Exploration efforts have just scratched the surface of Canada's mineral-rich land mass. We are the world's largest exporter of minerals and the United States is our largest export market. A world leader in new mining technology and production techniques, Canada has the added benefit of a government committed to the mineral industry.

Canadian business has responded to these new investment opportunities. Preliminary statistics and forecasts indicate that petroleum industry investment will be up as much as 27 per cent in 1985 over the previous year. A number of major mineral finds are being developed. And now, as a result of the Government of Canada's nondiscriminatory approach, the doors are open to foreign investors as well. Some of the many opportunities for investing in Canadian energy and minerals are briefly outlined in this booklet.

Canada's geology is promising, our economics are favourable and our policies are supportive. Investing in Canada makes good business sense.

OPPORTUNITIES IN ENERGY



Relative to the ... investment prospects of the oil industry in the United States and the U.K. and Norway and so many other areas around the world, certainly Canada does look extremely bright....

"I think geologically that Canada simply offers one of the

most conducive environments for exploration and development drilling in the world today.

Bernard J. Picchi Salomon Brothers Inc. in an interview on Canadian radio anada's petroleum resources are immense, comprising conventional oil and gas in western Canada, the oil sands of northern Alberta and large oil and gas discoveries in the Arctic and off the east coasts of Nova Scotia and Newfoundland and Labrador.

Below are the major areas of oil and gas exploration in Canada today. The firms involved in these activities require injections of investment capital to proceed with exploration and development.

WESTERN CANADA SEDIMENTARY BASIN

The Western Canada Sedimentary Basin—which covers most of Alberta and large parts of Saskatchewan, Manitoba, northern British Columbia and the Northwest Territories—has historically been Canada's main source of oil and gas and the centre of land-based exploration and development. But compared with similar regions in the United States, exploration has only just begun. Large areas exist in which deep drilling is so sparse that deposits of significant size remain to be found. Future discoveries may include many oil and gas pools located by extensive geophysical exploration and geological modelling.

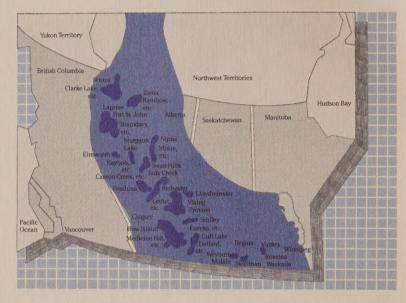
Estimates for new recoverable conventional oil resources in the Western Canada Sedimentary Basin range from 1.5 billion barrels (238 million cubic metres) (high confidence) to 5 billion barrels (795 million cubic metres) (speculative). Remaining established reserves in Canada's producing areas are currently 5.3 billion barrels (846 million cubic metres) of crude oil, 1.5 billion barrels (235 million cubic metres) of petroleum liquids and 99.7 trillion cubic feet (2.8 trillion cubic metres) of gas.

HEAVY OIL

As reserves of conventional oil diminish, heavy oil and bitumen will become increasingly important sources. (Heavy oil is a sludgelike substance so thick that enhanced recovery techniques are required to bring it to the surface.) Much of this production will be destined for export markets in the years ahead.

Some 150 000 barrels per day (b/d) (24 000 cubic metres) of heavy oil are extracted from Alberta and Saskatchewan, more than half of which is exported to the United States. Only a fifth of Canada's estimated 10 billion barrels (1.6 billion cubic metres) of heavy oil is recoverable using existing thermal and tertiary techniques. More advanced technology is required for this resource to be fully exploited.

In order to be used in Canadian refineries, heavy oil and bitumen must be upgraded to a suitable synthetic crude oil. NewGrade Energy Inc. recently announced its decision to proceed with construction of a $50\,000\,\mathrm{b/d}$ ($8000\,\mathrm{cubic}$ metres) upgrader in Regina. Other facilities are under consideration.

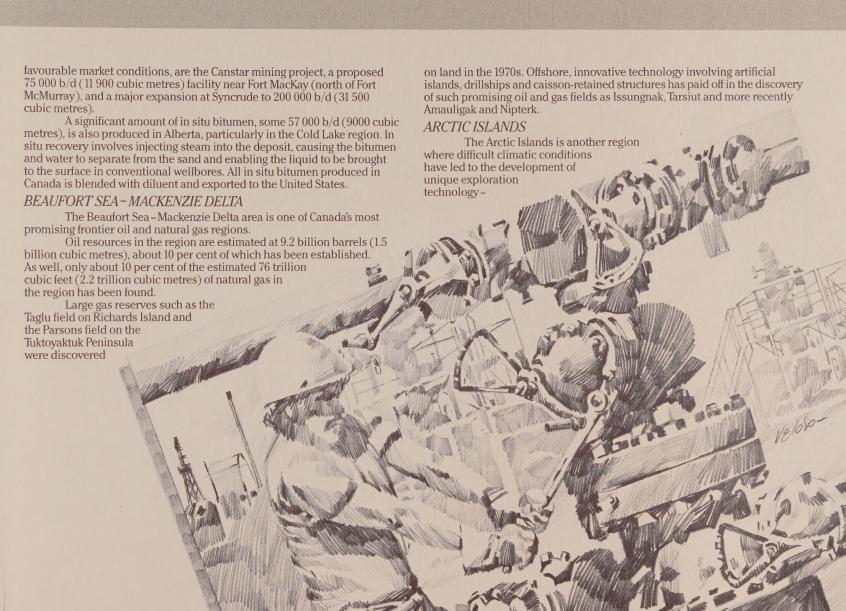


- Oil and Gas Fields
 (oil sand deposits excluded)
- Western Sedimentary Basin
 - ☐ Provincial Lands
 ☐ Frontier Lands
- NDC

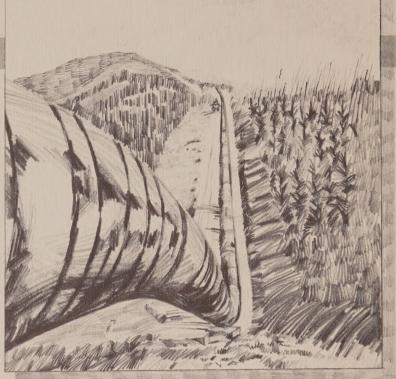
OIL SANDS

Canada's conventional oil deposits are dwarfed by the resources contained in the oil sands of Alberta. Currently, only about 10 per cent of this oil—which is in the form of bitumen, a substance more solid than liquid—can be extracted using surface mining techniques. However, research into enhanced recovery will increase productivity capacity substantially. Two processing plants near Fort McMurray in northern Alberta are currently upgrading surface-mined bitumen to synthetic crude.

The Syncrude plant has the capacity to produce $120\ 000\ b/d\ (19\ 000\ cubic metres)$ of synthetic crude and is expanding to $140\ 000\ b/d\ (22\ 500\ cubic metres)$ by the end of 1986. The second plant, Suncor, produces about $48\ 000\ b/d\ (7600\ cubic\ metres)$ and has the capacity for an additional $10\ 000\ b/d\ (1600\ cubic\ metres)$. Two new development schemes, which will be dependent on







artificial ice platforms for drilling equipment are formed by pumping water to over-thicken existing ice.

The Sverdrup Basin between Melville and Ellesmere islands is the centre of activity in the High Arctic. The largest gas fields—Drake and Hecla—are found both on land and offshore. Gas reserves in the region are estimated at 13 trillion cubic feet (368 billion cubic metres), with deposits estimated at 80 trillion cubic feet (2.3 trillion cubic metres). Significant oil reserves have been located at the Cisco field, and the smaller Bent Horn field shipped the first cargo of oil from the Arctic in the summer of 1985. This first annual shipment of 100 000 barrels (16 00 cubic metres) indicates that Canada is willing and able to exploit its northern resources in an environmentally acceptable manner.

GRAND BANKS

Hibernia, the largest oil field discovery in North America since Prudhoe Bay (Alaska), is located on the Grand Banks off Newfoundland. One of 10 oil and gas discoveries in the region, Hibernia has estimated recoverable reserves of 500 to 800 million barrels (80 to 128 million cubic metres) and is expected

to come on stream in the early 1990s at a rate of 125 000 b/d to 150 000 b/d (20 000 to 24 000 cubic metres) per day.

The potential for additional discoveries in the Grand Banks is excellent: the Geological Survey of Canada estimates that up to 10 billion barrels (1.6 billion cubic metres) of oil could be discovered off Canada's east coast.

SCOTIAN SHELF

The discovery of the Venture gas field in 1979 and subsequent successes near Sable Island and in deeper waters are promising indicators that marketable quantities of natural gas may be located on the Scotian Shelf.

Based on the success of future exploration activities, construction of the Venture Gas Project, a pipeline delivery system to mainland Nova Scotia, could proceed in the late 1980s. Still in the developmental stage, this project would have the capacity to handle 360 million cubic feet (10 million cubic metres) of gas per day.

Gas resources on the Scotian Shelf are estimated at 15 to 20 trillion cubic feet (425 billion to 566 billion cubic metres).

MINERAL OPPORTUNITIES

Ineral exploration is being carried out in virtually every region of Canada today. Examples of areas where significant exploration is under way are outlined below.

TOODOGGONE AREA (BRITISH COLUMBIA)

Recent drilling in this area 95 miles (150 km) southeast of Dease Lake in northern British Columbia has confirmed the existence of significant gold deposits. Development of the area, which also contains deposits of silver, could begin by the end of 1988.

LA RONGE GREENSTONE BELT (SASKATCHEWAN)

Mineralized sections containing gold deposits have been located in the La Ronge Greenstone Belt, some 350 miles (560 km) north of Regina. One of the discoveries, about 70 miles (110 km) north of La Ronge at Star Lake, could be brought into production in 1987. A second find is located about 78 miles (125 km) northeast of La Ronge at Seabee – Laonil Lake, and exploration is ongoing at nearby Mallard Lake, where initial results have been encouraging.

CAMERON LAKE - KENORA AREA (ONTARIO)

The Cameron Lake – Kenora area near the Ontario-Manitoba border is currently a major centre of mineral exploration in Canada. Significant gold deposits have already been located at Cameron Lake – Biggs Lake and further exploration is planned around Cameron Lake, at the Monte Cristo project at Rowan Lake and in other locales.

CASA-BERARDI AREA (QUEBEC)

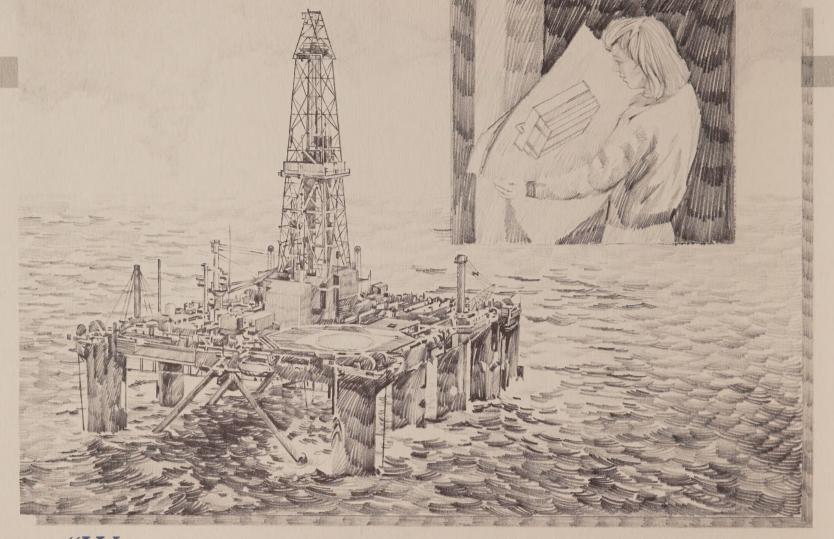
Recent discoveries of gold deposits at Golden Pond and Golden Pond East in the Casa-Berardi area 85 miles (135 km) north of Rouyn-Noranda, have led to plans for future exploration efforts. Exploration is also planned in Recher and Montgolfier townships.

CHETWYND - CINQ CERF (NEWFOUNDLAND)

Diamond drilling in this area 40 miles (65 km) northeast of Port aux Basques has resulted in the discovery of significant gold mineralization.

A further \$3.2 million exploration program is planned at Chetwynd – Cinq Cerf.





We are delighted with the Western Accord. It is the most positive piece of fiscal and regulatory legislation that this

country has seen in many years....The Accord signals the return to an economy driven by the disciplines of the marketplace....?

Gordon Capital Corporation Guide April 3, 1985

CANADA'S NEW INVESTMENT CLIMATE



Canada needs investment.

The Government of Canada believes that Canadian entrepreneurship, backed by domestic and foreign capital, will fuel the country's economic engine.

And Canada has all the ingredients for investment success: a wealth of natural resources, a stable business environment, abundant low-cost energy, a strong industrial base, a skilled labour force, superior communications and transportation networks, a thriving domestic market and convenient access to some of the world's major markets, including the United States.

To assist investors, the Government of Canada has established Investment Canada,* an agency whose mandate is to encourage investment. Investment Canada can tell you what you need to know about doing business in Canada and can put you in touch with the right people to make things happen.

Information on specific energy and mineral projects is available by writing Investment Enquiries, Communications Branch, Energy, Mines and Resources Canada, 580 Booth Street, Ottawa, Ontario, Canada KIA 0E4. As well, industry associations and investment consultants can provide valuable information on future prospects in Canada's resource-based industries.

There is a new investment climate in Canada today. The country's enormous and varied resources, coupled with a government eager to support and promote their development, can only result in major returns to foreign as well as domestic investors.

Canadian energy and minerals. Now, more than ever, they are timely investments.

*Investment Canada's services are available through Canadian consulates and embassies abroad or by calling 1-800-267-0490 (for Canada and the continental U.S.) or (613) 996-7869, or by writing: Investment Canada, 240 Sparks Street, 5th Floor West, P.O. Box 2800, Station D, Ottawa, Ontario, Canada KIP 6A5.

Aussi disponible en français Minister of Supply and Services Canada 1985 Cat. No. M22-87/1985E ISBN No. 0-662-14420-1

